

GED 511 Fundamentals of Surveying and Mapping (3+0+0) 3 ECTS 7
Autumn 2019-2020

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COURSE DESCRIPTION

Basic concepts of surveying and mapping; principal surveying instruments and accessories; measurement of angles and distances; error concepts in surveying operations; elements of control network; surveys for locating details; map plotting and drafting; types of surveying; topographic, cadastral, engineering, route, mine, hydrographic, industrial surveying; uses of surveys; elements of surveying projects; elements of photogrammetry; map projections.

REFERENCE BOOKS

- Charles A. Herubin, "Principles of Surveying", Pearson Education, 1998.
- Arthur Bannister, "Surveying", Addison Wesley Longman, 1998.
- Barry F. Kavanagh, "Surveying: Principles and Application", Prentice Hall, 2002.
- Barry F. Kavanagh, "Geomatics", Prentice Hall, 2002.

COURSE CONTENT

Definition of Surveying
Practice the use of measuring tape
Distance Measurement
Building Measurement
Triangulation
Levelling
Angular Measurements
Traverse Calculation
Tacheometry Calculation
Building Height Measurement
GPS Measurement

COURSE OBJECTIVES

To introduce principal surveying equipments and how to use them. To provide necessary knowledge and skills for surveying problems.

GRADING

Officework	25%
Fieldwork	25%
Final exam	50%